



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,571	04/07/2000	Rajeev Chawla	06502.0177	1838

22852 7590 09/08/2003

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
1300 I STREET, NW  
WASHINGTON, DC 20005

EXAMINER
----------

RICHEY, JAMES J

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 09/08/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/545,571

Applicant(s)

CHAWLA ET AL.

Examiner

James J. Richey

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09/04/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-80 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/07/2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because its length exceeds the maximum allowable limit. The abstract in an application filed under 35 U.S.C. 111 may not exceed 150 words in length. Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: Page 10, line 15 makes reference to step 164 in Figure 9 as forwarding information to the client via the router. This reference should be step 174. Appropriate correction is required.
3. The disclosure is objected to because of the following informalities: Page 12, line 18 states that packet 218, shown in Figure 12, has the proxy server address as the source field. However, reference 218 shows the source field as being the origin server. Appropriate correction is required.

### ***Drawings***

4. The drawings are objected to because Figure 13, step 262 makes reference to packet 218, located in Figure 12, as having the proxy server address in the source field. However, packet 218 has the origin server as the address in the source field. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

5. Claim 7 is objected to because of the following informalities: Reference of 'claim A' is indefinite. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6, 11-16, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Templin, Patent Number 5,781,550.

Regarding Claims 1, 11, 21, 41, 51, and 61; Figure 5 in Templin shows Host A (item 150) attempt to send information to Host C (item 501), that is intercepted and analyzed by Gateway B (item 300). Gateway B then sends the information to Host C (item 160) and acts as a transparent proxy between the two nodes (see col. 8, lines 24-63).

Regarding Claims 2, 12, 22, 42, 52, and 62; Templin discloses, in a myriad of places, how a packet is analyzed and sent directly if it is destined for a local computer, or is manipulated by the proxy server and sent if it is destined for a 'foreign' computer (col. 3, lines 23-26; col. 4, lines 28-32; col. 5, lines 15-20; col. 6, lines 14-22).

Regarding Claims 3, 13, 23, 43, 53, and 63; Figure 5 in Templin discloses how information from Host C (item 503) is manipulated by Gateway B and forwarded to Host A as information 504, which has the origin of the packet appearing to come from Host C directly (col. 8, lines 48-54). It is inherent that this system would do this for all packets communicated between the two hosts, which include acknowledgements of connection setup that are part of TCP/IP packet communication.

Art Unit: 2663

Regarding Claims 4, 14, 24, 44, 54, and 64; Templin discloses that the destination address and port number of each packet the gateway receives, as well as the source address and port number, are recorded in fields stored within its memory (col. 7, lines 22-30).

Regarding Claims 5, 15, 25, 45, 55, and 65; Figure 5 in Templin discloses Gateway B communicating information 502 to Host C as a result from Host A's initial request (item 501) (col. 6, lines 14-22; col. 8, lines 24-43).

Regarding Claims 6, 16, 26, 46, 56, and 66; Figure 5 in Templin discloses Gateway B communicating information 504 to Host A as a result from Host C's initial request (item 503) (col. 8, lines 43-54).

Regarding Claims 31-36, and 71-76; Templin discloses that the invention can be run using software modified to implement said invention (col. 4, lines 49-55; col. 5, lines 60-67; col. 6, lines 1-4). Thus, it is inherent that all aspects mentioned in the invention will have a software equivalent that performs each task.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 9-10, 17, 19-20, 27, 29-30, 37, 39-40, 47, 49-50, 57, 59-60, 67, 69-70, 77, 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Templin as applied to claims 1-6, 11-16, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76 above, and further in view of Aviani, Patent Number 6,532,493.

Art Unit: 2663

Regarding Claims 7, 17, 27, 37, 47, 57, 67, and 77; Templin discloses a manner to transparently proxy between two sources, but does not mention the use of a system cache or the need to send information to an intermediate destination. Aviani discloses a method that transparently proxies between two sources that includes the use of an intermediate network cache which information is routed to. Figure 1 shows information coming into router (102) from client (100) is analyzed and stored (col. 4, lines 20-31) and then sent to cache (108/110) after its heading is altered to designate the router (102) as the source of the packet (col. 5, lines 34-52). By combining Templin's proxy server with Aviani's use of an intermediate cache, the result would be that of applicant's claims. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such a caching system into the proxy server so as to reduce network traffic and minimize the delay of information return.

Regarding Claims 9-10, 19-20, 29-30, 39-40, 49-50, 59-60, 69-70, 79-80; Templin discloses a manner to transparently proxy between two sources, but does not mention the use of a system cache or the need to send information to an intermediate destination. Aviani discloses a method that transparently proxies between two sources that includes the use of an intermediate network cache which information is routed to. Figure 1 discloses how an information request from client (100) is received by router (102) and forwarded to network cache (108/110). The request is then searched in the cache and, if present, is returned to the router, which in turn, is sent back to the client (col. 5, lines 53-67; col. 6, lines 1-4). This is all done transparently from the client's viewpoint, which makes it appear that the information is coming from its intended destination, rather than the network cache (col. 3, lines 17-20). By combining Templin's proxy server with Aviani's use of an intermediate cache, the result would be that of applicant's claims.

Art Unit: 2663

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such a caching system into the proxy server so as to reduce network traffic and minimize the delay of information return.

8. Claims 8, 18, 28, 38, 48, 58, 68, and 78 rejected under 35 U.S.C. 103(a) as being unpatentable over Templin as applied to claims 1-6, 11-16, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76 above, as well as to Aviani as applied to claims 7, 9-10, 17, 19-20, 27, 29-30, 37, 39-40, 47, 49-50, 57, 59-60, 67, 69-70, 77, 79-80, and further in view of Coile, Patent Number 6,473,406.

Regarding Claims 8, 18, 28, 38, 48, 58, 68, and 78; Templin discloses a manner to transparently proxy between two sources, but does not make specific mention of determining whether or not the client's communication is a setup request. Aviani discloses a manner of transparently proxying between two sources that also uses a network cache, but also does not make specific mention of determining if communications are setup requests. Coile discloses a method of transparently proxying a connection that checks to see if the client's communication is a SYN request and directly forwards the message if such is the case (col. 3, lines 23-34; col. 9, lines 44-67; col. 10, lines 64-67; col. 11, lines 1-4). If the information is not a setup request, the packet is transparently proxied between the client and the server (col. 3, lines 23-34).

Furthermore, Coile also mentions the possibility of implementing their invention with a type of caching system (col. 6, lines 19-31). By combining the use of SYN detection disclosed by Coile, with the proxy server disclosed by Templin, along with the caching scheme mentioned by Aviani, the result would be that of applicant's claims. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such a setup

Art Unit: 2663


recognition into a transparent proxy server with caching system so as to properly handle the initial connection setup that occurs between two nodes in a TCP/IP based packet system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Richey whose telephone number is (703) 305-4682. The examiner can normally be reached on M-F: 8:30am-6pm, Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

\*\*\*

  
CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600